What is claimed is:

1. An apparatus for obtaining a fluid sample in a subterranean well, the apparatus comprising:

a sampler having a sample chamber configured for being selectively in fluid communication with an exterior of the sampler and operable to receive at least a portion of a fluid sample;

a housing disposed exterior to the sampler, the housing defining an annulus between at least part of the housing and at least part of the sampler,

wherein the annulus comprises a compressible fluid.

2. The apparatus of claim 1, wherein the apparatus is capable of being disposed in the subterranean well using at least one of a slickline, wireline, or coiled tubing.

3. The apparatus of claim 1, wherein the compressible fluid comprises nitrogen.

4. The apparatus of claim 1, wherein the annulus is selectively in fluid communication with the sample chamber such that the compressible fluid is operable to pressurize the fluid sample received in the sample chamber.

5. The apparatus of claim 1, further comprising a manifold configured to provide the fluid communication between the sampling chamber and the annulus.

6. The apparatus of claim 1, wherein the housing encases at least a portion of the sampler.

7. The apparatus of claim 1, wherein the annulus comprises a volume sufficient to contain a volume of the compressible fluid to pressurize the fluid sample received in the sample chamber.

8. The apparatus of claim 1, wherein the housing extends longitudinally along the length of the sampler.

9. The apparatus of claim 1, wherein the housing is generally coaxial with the sampler.

10. The apparatus of claim 1, further comprising a trigger configured for causing the apparatus to obtain the fluid sample.

11. The apparatus of claim 10, further comprising a trigger sleeve disposed exterior to the trigger, the trigger sleeve being capable of protecting the trigger.

12. A method for obtaining a fluid sample in a subterranean well, the method comprising:

positioning a fluid sampler in the well by at least one of a slickline, wireline, or coiled tubing;

obtaining a fluid sample in a sample chamber of the fluid sampler;

pressurizing the fluid sample using a pressure source disposed in an annulus defined by a housing encasing the fluid sampler, the pressure source being in fluid communication with the sample chamber

13. The method of claim 12, wherein the annulus is defined by an inner diameter of the housing and an outer diameter of the sampler.

14. The method of claim 12, wherein the annulus extends longitudinally along the length of the sampler.

15. The method of claim 12, wherein the pressure source comprises a compressible fluid.

16. The method of claim 15, wherein the compressible fluid comprises nitrogen.

17. The method of claim 12, further comprising retrieving the fluid sampler to the surface.

18. A system capable of being disposed with at least one of a slickline, wireline, or coiled tubing for obtaining a fluid sample in a subterranean well, the system comprising:

a sampler for receiving a sample of hydrocarbon fluid in a sample chamber, the sampler having an outer diameter;

a housing disposed exterior to the outer diameter of the sampler, the housing having an inner diameter; and

a pressure source comprising a compressible fluid, the pressure source disposed within an annulus defined by the outer diameter of the sampler and the inner diameter of the housing,

wherein the housing is configured for providing a pressure seal between the annulus and an environment exterior to the housing, and

wherein the sampler is configured for being selectively in fluid communication with the pressure source such that the compressible fluid is operable to pressurize the sample of hydrocarbon fluid.

19. The system of claim 18, wherein the sampler comprises a valving assembly configured to permit pressure from the pressure source to be applied to the sampler.

20. The system of claim 18, further comprising a trigger configured for causing the sampler to obtain the hydrocarbon fluid.

## CLAIMS

What is claimed is:

1. An apparatus for obtaining a fluid sample in a subterranean well, the apparatus comprising:

a sampler having a sample chamber configured for being selectively in fluid communication with an exterior of the sampler and operable to receive at least a portion of a fluid sample;

a housing disposed exterior to the sampler, the housing defining an annulus between at least part of the housing and at least part of the sampler,

wherein the annulus comprises a compressible fluid.

2. The apparatus of claim 1, wherein the apparatus is capable of being disposed in the subterranean well using at least one of a slickline, wireline, or coiled tubing.

3. The apparatus of claim 1, wherein the compressible fluid comprises nitrogen.

4. The apparatus of claim 1, wherein the annulus is selectively in fluid communication with the sample chamber such that the compressible fluid is operable to pressurize the fluid sample received in the sample chamber.

5. The apparatus of claim 1, further comprising a manifold configured to provide the fluid communication between the sampling chamber and the annulus.

6. The apparatus of claim 1, wherein the housing encases at least a portion of the sampler.

7. The apparatus of claim 1, wherein the annulus comprises a volume sufficient to contain a volume of the compressible fluid to pressurize the fluid sample received in the sample chamber.

8. The apparatus of claim 1, wherein the housing extends longitudinally along the length of the sampler.

9. The apparatus of claim 1, wherein the housing is generally coaxial with the sampler.

10. The apparatus of claim 1, wherein the compressible fluid has a greater compressibility than hydraulic fluid.

11. A method for obtaining a fluid sample in a subterranean well, the method comprising:

positioning a fluid sampler in the well by at least one of a slickline, wireline, or coiled tubing;

obtaining a fluid sample in a sample chamber of the fluid sampler; and

pressurizing the fluid sample using a pressure source disposed in an annulus defined by a housing encasing the fluid sampler, the pressure source being in fluid communication with the sample chamber and including a compressible fluid in the annulus.

12. The method of claim 11, wherein the annulus is defined by an inner diameter of the housing and an outer diameter of the sampler.

13. The method of claim 11, wherein the annulus extends longitudinally along the length of the sampler.

14. The method of claim 11, wherein the compressible fluid comprises nitrogen.

15. The method of claim 11, further comprising retrieving the fluid sampler to the surface.

16. The method of claim 11, wherein positioning the fluid sampler in the well by at least one of the slickline, wireline, or coiled tubing includes positioning the fluid sampler in the well by wireline.

17. The method of claim 11, further comprising running from a surface of the well the fluid sampler including the pressure source including the compressible fluid that is released into the annulus encasing the fluid sampler in the well.

18. A system capable of being disposed with at least one of a slickline, wireline, or coiled tubing for obtaining a fluid sample in a subterranean well, the system comprising:

a sampler for receiving a sample of hydrocarbon fluid in a sample chamber, the sampler having an outer diameter;

a housing disposed exterior to the outer diameter of the sampler, the housing having an inner diameter; and

a pressure source comprising a compressible fluid, the pressure source disposed within an annulus defined by the outer diameter of the sampler and the inner diameter of the housing such that the compressible fluid is releasable in the annulus,

wherein the housing is configured for providing a pressure seal between the annulus and an environment exterior to the housing, and

wherein the sampler is configured for being selectively in fluid communication with the pressure source such that the compressible fluid is operable to pressurize the sample of hydrocarbon fluid.

19. The system of claim 18, wherein the sampler comprises a valving assembly configured to permit pressure from the pressure source to be applied to the sampler.

20. The system of claim 18, further comprising a trigger configured for causing the sampler to obtain the hydrocarbon fluid.